User manual

SKF @ptitude Observer Database Administrator

User Manual Part No. 32170600-EN Revision I Observer 10.5.0

WARNING! - Read this manual before using the product. Failure to follow the instructions and safety precautions in this manual can result in serious injury, damage to the product, or incorrect readings. Keep this manual in a safe location for future reference.

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1 Introduction

Overview

The SKF @ptitude Observer Database Administrator is an invaluable tool when working with an SKF @ptitude Observer system. It has many features which are needed to have a complete and updated system.

The SKF @ptitude Observer Database Administrator has tools for working with the SKF @ptitude Observer database which currently supports SQL Server versions from 2005 to 2016.

SKF @ptitude Observer is shipped with SQL Server Express 2014 which is a free version of the SQL Server engine but with the limitation of storing ten Gigabytes per database.

Installation

The SKF @ptitude Observer Database Administrator tool is installed from the auto run menu of the SKF @ptitude Observer DVD. It is included in the SKF @ptitude Monitoring Suite package as an option. For detailed information on how to install SKF @ptitude Monitoring Suite, refer to "@ptitude Observer Installation Manual".

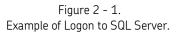
The default installation path is C:\Program Files (x86)\SKF\ObserverX.Y.

Starting

To start @ptitude Observer Database Administrator tool, click the shortcut on the start menu under Programs\SKF @ptitude Monitoring Suite X.Y \@ptitude Observer Database administrator.

Launching





- Server Name specifies which computer holds the database server. It is possible to specify either an IP address or a computer name, when connecting to a different database server. The default value is (*Local*) which specifies the computer on which the tool is running, at the moment.
- **Authentication** defines whether to use *Windows authentication* or *SQL Server authentication*.
- User name is required for *SQL Server authentication*. The user name "sa" is frequently used. However, user name can be changed along with the password if logging in with different credentials.
- **Password** is required for SQL Server authentication.

After a successful login, a screen opens up with a list of available SQL databases. The following is an example.

| @ptitude Observer Dat | tabase Admin | strator 10.5.0 | |
|-----------------------|--------------|----------------|--|
| le Server Databa | se Help | | |
| | | | |
| Databases | | | |
| Name | Version | | |
| 间 IMx-8 Alpha Test | 10,5 | | |
| 🥑 Observer | 10,5 | | |
| 间 Regression testing | 10,5 | | |
| | | | |
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| | | | |
| | | | |

Figure 2 - 2. Example of Overview of SQL Databases

SQL server interfaces are grouped into two operations; <u>Server operations</u> and <u>Database</u> operations.

Server Operations

The server operations are, as the name suggests, operations related to the server rather than any specific database.

The following are the available server operations.

- Install database from DVD
- <u>Create new database</u>
- <u>Attach database</u>
- Manage logins
- Database transfer
- <u>Restore database</u>
- <u>Hide system databases</u>
- Update database list

Install Database from DVD

Install database from DVD allows to install available @ptitude Observer databases from the @ptitude Observer DVD.

| Turbine WindConDemaX |
|-------------------------|
| Turbine |
| |

Figure 2 - 3. Example of Install a SQL Database.

- Select database to install.
- **Install as** assigns a name to the selected database.

Create New Database

| Create database | | |
|-------------------------|---|--|
| Name: | NewDatabase | |
| Database file Location: | c:\Program Files\Microsoft SQL Server\MSSQL10.MSSQLSERVER\MSSQL | |
| | Create <u>C</u> ancel | |

Figure 2 - 4. Example of Create a SQL Database.

- **Name** is for the database to be created. This name cannot be the same as an existing database name.
- Database file location is where the new database will reside.

Attach Database

Attach database is used to attach a detached database to the SQL server.

| 🚺 Attach database | |
|-----------------------|--|
| Attach database | |
| Name: | Observer |
| Files | |
| Database file: | c:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MSSQL\DATA\Observer |
| | Attach log file C Create new log file |
| Transaction log file: | c:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MSSQL\DATA\Observer |
| | |
| | |
| | Attach <u>C</u> ancel |

Figure 2 - 5. Example of Attach a SQL Database.

- Name is the database to be attached.
- Database file is the .mdf file of the database to be attached.
- **Transaction log file** is the SQL server log file of the database to be attached. An existing log file can be attached, or a new one created.
 - Attach log file allows to attach an existing log file from the location stated at Transaction log file.
 - > Create new log file allows to create a new log file.

Manage Logins

Manage logins operation allows to add or remove SQL Server logins. Later, these logins can be added to the list of the <u>Manage Users</u> in order to access specific databases. Note that the logins and users managed in the @ptitude Observer Database Administrator tool are for the SQL server and the databases only. They are not the users who can configure in @ptitude Observer.

| 魐 Manage logins | |
|--|--------------|
| BUILTIN\Användare NT INSTANS\SYSTEM sa | |
| Add Remove | Set password |
| | Close |

Figure 2 - 6. Example of Manage Logins on SQL Server.

- Add allows to add a user, with name and password, to the SQL Server logins.
- **Remove** eliminates the selected user from the SQL Server logins.
- **Set password** allows the current password of the selected user, to be changed.

Database Transfer

Database transfer enables the user to transfer a database from one location to another. This feature is often used by MasCon48 portable unit users to transfer the database from the portable unit to a stationary or portable PC or vice versa.

| 🥫 Database transfer | × |
|--|---|
| Source © Currently logged in server © Other server | Destination Currently logged in server Other server |
| Server name: | Server name: |
| Database: | New database: |
| | Transfer <u>C</u> ancel |

Figure 2 - 7. Example of SQL Server Database Transfer.

- Source refers to the source location from which the database should be copied.
 - **Currently logged in server** is the SQL Server that @ptitude Observer Database Administrator tool has been connected to when starting the software.
 - Other server refers to a server located in a different location rather than the current location. In this case, additional information such as the server name, authentication and database is to be entered. In addition, login and password are required if the authentication has been set to SQL Server authentication.
- Destination refers to the target location to which the database should be copied.
 - **Currently logged in server** is the SQL Server that @ptitude Observer Database Administrator tool has been connected to when starting the software.
 - Other server refers to a server located in a different location than the current location. In this case, additional information such as the server name, authentication and new database name is to be entered. In addition, login and password are required if the authentication has been set to SQL Server authentication. The new database name cannot be an already existing name, in the destination server.

Restore Database

Restore database operation restores databases from the backup files, if necessary. Backup files are handled by <u>Manage Backup</u> interface under Database Operations.

Hide System Databases

Hide system databases operation is a toggle button that shows or hides system databases from the list of databases.

Update Database List

Update database list refreshes the list of databases.

Database Operations

Database operations are, as the name suggests, the operations that are related to databases. The specific database on which the operation is to be performed is selected from the database list. Most operations support the selection of multiple databases if more than one is installed. To select multiple databases, hold the [Ctrl-key] or the [shift-key] and click on the databases in the list. Remember to double check which databases have been selected. Model, Master, msdb, pubs and tempdb databases should never, under any circumstances, be selected for modification.

The following are the available database operations.

- Upgrade selected databases
- <u>Update diagnoses</u>
- Update bearing library
- Update to UTC
- Update Seeds
- Manage users
- Manage backup
- Backup now
- Detach database
- <u>Shrink database</u>
- Run SQL script

Upgrade Selected Databases

Upgrade selected databases operation upgrades the selected databases according to definition files. A definition file specifies how the database structure should look like in a @ptitude Observer database. This feature is used when upgrading the system to the new version of @ptitude Observer. The definition file is located in the @ptitude Observer DVD under the directory NewVer\Database administrator and has the extension .DEF.

The interface can take from 10 seconds up to two minutes depending on the speed of the CPU and the available memory at the moment. When the interface is completed, the user will receive a message stating that the upgrade has been finished. Otherwise, the user will receive an error message.

| Update database | × |
|---------------------------|---------------------------|
| Database definition file: | |
| | |
| | |
| | |
| | |
| | <u>O</u> k <u>C</u> ancel |
| | |

Figure 2 - 8. Update a SQL Database.

• Database definition file is a text file with .DEF extension. It is used to upgrade the selected database(s) to the latest version. The database definition file can be found in the directory where Observer is installed or on the Observer DVD in the NewVer/Database administrator directory.

Update Diagnoses

Update Diagnoses updates the standard diagnosis rules with the latest released rules for the selected database(s). Any of the displayed unit values may be changed.

| 👺 Update diagnosis rules | |
|----------------------------|----------------|
| Electrical grid frequency: | 50 🔻 [Hz] |
| Acc. Unit: | • |
| Vel. Unit: | • |
| Disp. Unit: | • |
| Env. unit: | • |
| Update | <u>C</u> ancel |

Figure 2 - 9. Example of Update Diagnosis Rules on a SQL Database.

Update Bearing Library

Update bearing library applies updated bearing information to the selected @ptitude Observer database(s)

Bearing files contain information on bearings from several different bearing manufacturers including SKF. The bearing information file has the extension .brg, and is located in the directory NewVer\Database administrator in the @ptitude Observer DVD.

It is recommended to also update the bearing database when updating @ptitude Observer to a newer version.

| Update bearing library | | |
|------------------------|--------|--------|
| Select bearing file: | | |
| | | |
| | | |
| | | |
| | | |
| | Update | Cancel |



Update a Bearing Library on a SQL Database.

Update to UTC

Update to UTC (universal time) converts the local time to the universal time. In order to have the time converted correctly, the local time zone of the @ptitude Observer Monitor computer, will need to be entered. Note that @ptitude Observer 8 and later versions use the universal time. Therefore, this function is mainly useful for the older databases which were converted to the latest version.

Update Seeds

This function should be executed on the database if the database had previously been set up as a destination for an SQL Server replication procedure (configured in SQL Server Enterprise Manager). This will restore the Seed.

Manage Users

The manage users can be used to add or remove a user for the selected database. However, this is not to be confused with the users in *@ptitude Observer*.

| M | anage users | × |
|---|---|---|
| | dbo guest INFORMATION_SCHEMA sys | |
| | Add Remove | |
| | Close | |

Figure 2 - 11. Example of Manage Users on a SQL Database.

- Add launches the Edit user screen shown below and allows a user to be added.
- **Remove** allows a selected user from the list, to be removed.

| Edit user | |
|---------------------------|----------|
| Login name: User name: | |
| | <u> </u> |

Figure 2 - 12. Edit a User on a SQL Database.

- Login name is a name that was created by <u>Manage Logins</u> under Server Interfaces.
- User name is the name to be used which is optional. If user name is omitted, the login name becomes user name.

Manage Backup

It is important to ensure that the system performs backups frequently.

The manage backup creates backup jobs inside the SQL Server. The backup job creates a .bak file and places the file in the path directory specified with the form below. The backups can be performed daily at a specific time. It is recommended that the backups are configured to run when the computer or network environment has low workload. This is a complete backup which backs up everything in the @ptitude Observer database each time it runs and overwrites existing backup files if they exist.

It is common for the backup to be performed directly to a network resource which is regularly backed up. Alternatively, after the .bak file has been created, it can be moved or copied to a backup media such as a backup tape, CD or DVD.

| Daily Back | up | | |
|--------------|---------------------|-------------------|--------|
| Name: | ProCon backup | | |
| Path: | (Default) SQL Serve | er Folder/Backup/ | |
| Description: | | | ~ |
| Daily at: | 00:00:00 | ✓ Enabled OK | Cancel |

To temporarily disable backups, the user can uncheck the **Enabled** field.

Figure 2 - 13. Example of Daily Backup on a SQL Database.

Important- This feature is only available with SQL Server full version. It is not available with the SQL Server Express version included in the @ptitude Observer DVD.

Backup Now

It performs a backup of the selected database immediately.

Detach Database

Detaching a database is an effective way to disconnect a database from the SQL Server and move it to a different location. Detaching a database will free up the .ldf file and the .mdf file for the specific database and the user can then freely copy, rename or move the files. Before working directly with the database files, it is crucial that the database is first detached or else there is a danger of the database becoming corrupted.

Shrink Database

Shrink database allows each file within the selected database(s) to be shrunk to remove unused pages and tries to minimize fragmentation. Both data and transaction log files can be shrunk. This activity occurs in the background and does not affect any user activity within the database. As @ptitude Observer database grows, this interface becomes more useful.

Run SQL Script

Run SQL script allows the user to execute advanced Structured Query Language scripts directly on the specific database.

Important - Use with caution. Improper usage of this function may cause loss of data and database corruption.

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- (a) Licensor warrants that the Software will perform substantially in accordance with its documentation for a period of 180 days from the date of shipment of the Software; provided, however, that the foregoing warranty only applies if: (i) Licensee makes Licensor aware of any defect with the Software within seven (7) days after the occurrence of the defect; (ii) Licensee has paid all amounts due under this Agreement; and (iii) Licensee has not breached any provision of this Agreement. The foregoing warranty does not apply in the event that: (i) the Software and documentation have been subject to misuse, neglect, alteration, modification, customization, improper installation, and/or unauthorized repair; (ii) the Software or any associated software or equipment have not been properly maintained in accordance with applicable specifications and industry standards or have been maintained in unsuitable environmental conditions: or (iii) Licensee has used the Software in conjunction with other equipment, hardware, software, or other technology that created an adverse impact on the operation, functioning, or performance of the Software.
- (b) EXCEPT AS SET FORTH IN THIS SECTION 7 AND TO THE EXTENT PERMITTED BY APPLICABLE LAW, ALL

EXPRESS AND/OR IMPLIED WARRANTIES OR CONDITIONS, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, MERCHANTABILITY OF A COMPUTER PROGRAM, INFORMATIONAL CONTENT, SYSTEM INTEGRATION, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT, ARE HEREBY DISCLAIMED AND EXCLUDED BY LICENSOR.

(c) The remedies set forth in this Section 7 are the exclusive remedies available to Licensee for any problem in the performance of the Software.

8. LIMITATIONS ON LIABILITY

(a) Limitations and Exclusions. IN NO EVENT WILL LICENSOR BE LIABLE TO LICENSEE FOR ANY DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR OTHER SPECIAL DAMAGES, LOST PROFITS, OR LOSS OF INFORMATION SUFFERED BY LICENSEE ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE USE OF THE SOFTWARE, FOR ALL CAUSES OF ACTION OF ANY KIND (INCLUDING TORT, CONTRACT, NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR CONDITION, AND STATUTORY) EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE PRECEDING EXCLUSION AND DISCLAIMER OF DAMAGES SHALL APPLY TO ALL CLAIMS MADE BY LICENSEE RELATED TO OR ARISING OUT OF LICENSEE's USE OF THE SOFTWARE, INCLUDING, BUT NOT LIMITED TO, CLAIMS ALLEGING THAT THE SOFTWARE, OR ANY COMPONENT THEREOF, FAILED OF ITS ESSENTIAL PURPOSE OR FAILED IN SOME OTHER RESPECT.

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9. TERM AND TERMINATION

- (a) Term. This Agreement shall commence on the Effective Date and shall continue in existence until it is terminated in accordance with Section 9(b) below.
- (b) Termination. Licensor may terminate this Agreement and the license conveyed hereunder in the event that Licensee breaches any provision, term, condition, or limitation set forth in this Agreement, including but not limited to the license restrictions set forth in Section 2(d) of this Agreement.
- (c) Effect of Termination. Within ten (10) days after termination of this Agreement and the license granted hereunder, Licensee shall return to Licensor, at Licensee's expense, the Software and all copies thereof, and deliver to Licensor a certification, in writing signed by an officer of Licensee, that all copies of the Software have been returned to Licensor and that Licensee has discontinued its use of the Software.

10. ASSIGNMENT

Licensee shall not assign or otherwise transfer the Software or this Agreement to anyone, including any parent, subsidiaries, affiliated entities or third Parties, or as part of the sale of any portion of its business, or pursuant to any merger, consolidation or reorganization, without Licensor's prior written consent. Any assignment or transfer effected in violation of this Section 10 shall be void ab initio and of no force or effect.

11. FORCE MAJEURE

Neither party shall be in default or otherwise liable for any delay in or failure of its performance under this Agreement if such delay or failure arises by any reason beyond its reasonable control, including any act of God, any acts of the common enemy, the elements, earthquakes, floods, fires, epidemics, riots, failures or delay in transportation or communications; provided, however, that lack of funds shall not be deemed to be a reason beyond a party's reasonable control. The Parties will promptly inform and consult with each other as to any of the above causes that in their judgment may or could be the cause of a delay in the performance of this Agreement.

12. NOTICES

All notices under this Agreement are to be delivered by depositing the notice in the mail, using registered mail, return receipt requested, to the party's last known principal business address or to any other address as the party may designate by providing notice. The notice shall be deemed delivered four (4) days after the notice's deposit in the mail, if such notice has been sent by registered mail.

13. CHOICE OF LAW

This Agreement (including all Exhibits), including its formation, execution, interpretation, and performance, and the rights and obligations of the Parties hereunder, shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania, without regard to any conflicts of law (or choice of law) principles thereof.

14. CONSENT TO JURISDICTION

In the event that either party initiates litigation relating to or arising out of this Agreement, Licensor and Licensee irrevocably submit to the exclusive iurisdiction of the state or federal court in or for Philadelphia, Pennsylvania for the purposes of any suit, action or other proceeding relating to arising out of this Agreement or any transaction contemplated hereby or thereby ("Legal Proceedings"). Licensee further agree that service of any process, summons, notice, or document by U.S. registered mail to such Party's respective address shall be effective service of process for any Legal Proceeding. Licensor and Licensee irrevocably and unconditionally waive any objection to personal jurisdiction and/or the laying of venue of any Legal Proceeding in the state or federal court in or for Philadelphia, Pennsylvania, and hereby further irrevocably and unconditionally agree not to plead, argue, or claim in any such court that any Legal Proceeding brought in any such court has been brought in an inconvenient forum and otherwise waive any and all objections to the forum.

15. EXPORT CONTROLS

Licensee shall not export or reexport, directly or indirectly, the Software without complying with the export controls imposed by the United States Export Administration Act of 1979, as amended (or any future U.S. export control legislation) and the regulations promulgated thereunder.

16. GOVERNMENT END USERS

If Licensee is acquiring the Software for or on behalf of a subdivision of the U.S. federal government, this Section 16 shall apply. The Software was developed completely at private expense, is existing computer software, is a trade secret for all purposes of the Freedom of Information Act, is "restricted computer software" and in all respects proprietary data belonging solely to Licensor, and all rights are reserved under the copyright laws of the United States. Use, duplication, or disclosure by the Government is subject to restricted rights as set forth in subparagraphs (a) through (d) of the Commercial Computer Software Restricted Rights clause at FAR 52.227-19, or for DoD

units, the restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013.

17. TRADEMARKS

Licensee agrees that SKF @ptitude Analyst, SKF @ptitude Inspector, SKF @ptitude Observer, SKF @ptitude Decision Support or any other software within the SKF @ptitude family suite and the trade dress, logos and other designations of source used by Licensor to identify the Software are trademarks or registered trademarks of Licensor. Licensee shall not use Licensor's trademarks or service marks without the prior written consent of Licensor. If the Software contains any active links to web sites, you agree to maintain such active links and not redirect or modify them.

18. GENERAL PROVISIONS

- (a) Complete Agreement. The Parties agree that this Agreement is the complete and exclusive statement of the agreement between the Parties, which supersedes and merges all prior proposals, understandings and all other agreements, oral or written, between the Parties relating to the use of the Software.
- (b) Amendment. This Agreement may not be modified, altered or amended except by written instrument duly executed by both Parties. Any purchase orders or other ordering documents issued to Licensee by Licensor shall not have the effect of amending or modifying this Agreement, and shall only serve to memorialize the number of licenses or products ordered by Licensee. In the event of a conflict between the PSP Policies and this Agreement, the terms of this Agreement shall control.
- (c) Waiver. The waiver or failure of either party to exercise in any respect any right provided for in this Agreement

shall not be deemed a waiver of any further right under this Agreement.

- (d) Severability. If any provision of this Agreement is invalid, illegal or unenforceable under any applicable statute or rule of law, it is to that extent to be deemed omitted. The remainder of the Agreement shall be valid and enforceable to the maximum extent possible.
- (e) Read and Understood. Each party acknowledges that it has read and understands this Agreement and agrees to be bound by its terms.
- (f) Limitations Period. No action arising under, or related to, this Agreement, may be brought by either party against the other more than two (2) years after the cause of action accrues, unless the cause of action involves death or personal injury.
- (g) Attorneys' Fees. In the event any litigation is brought by either party in connection with this Agreement, the prevailing party in such litigation will be entitled to recover from the other party all the costs, reasonable attorneys'

fees, and other expenses incurred by such prevailing party in the litigation.

- (h) Authorized Representative. The person installing or using the Software on behalf of Licensee represents and warrants that he or she is legally authorized to bind Licensee and commit Licensee to the terms of this Agreement.
- (i) **Injunctive Relief.** Licensee agrees that Licensor may suffer irreparable harm as a result of a violation of Sections 2, 4, 6, 10, 15, and 17 of this Agreement and that monetary damages in such event would be substantial and inadequate to compensate Licensor. Consequently, Licensor shall be entitled to seek and obtain, in addition to such other monetary relief as may be recoverable at law or in equity, such injunctive other equitable relief as may be necessary to restrain any threatened, continuing, or further breach by Licensee without showing or proving actual damages sustained by Licensor and without posting a bond.

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